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A review of innovative tools for creative nucleic acid chemists that open the door to novel probes and therapeutic agents

Nucleic acids continue to gain importance as novel diagnostic and therapeutic agents. With contributions from noted scientists and scholars, *Enzymatic and Chemical Synthesis of Nucleic Acid Derivatives* is a practical reference that includes a wide range of approaches for the synthesis of designer nucleic acids and their derivatives.

The book covers enzymatic (including chemo-enzymatic) methods, with a focus on the synthesis and incorporation of modified nucleosides. The authors also offer a review of innovative approaches for the non-enzymatic chemical synthesis of nucleic acids and their analogs and derivatives, highlighting especially challenging species. The book offers a concise review of the methods that prepare novel and heavily modified polynucleotides in sufficient amount and purity for most clinical and research applications. This important book:

- Presents a timely and topical guide to the synthesis of designer nucleic acids and their derivatives
- Addresses the growing market for nucleotide-derived pharmaceuticals used as anti-infectives and chemotherapeutic agents, as well as fungicides and other agrochemicals.
- Covers novel methods and the most recent trends in the field
- Contains contributions from an international panel of noted scientistics

Written for biochemists, medicinal chemists, natural products chemists, organic chemists, and biotechnologists, *Enzymatic and Chemical Synthesis of Nucleic Acid Derivatives* is a practice-oriented guide that reviews innovative methods for the enzymatic as well as non-enzymatic synthesis of nucleic acid species.

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